DIRECT TESTIMONY AND EXHIBIT OF

LEAH J. WELLBORN

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2023-9-E

1 Q. STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

- 2 A. My name is Leah J. Wellborn, and I am a Manager of Consulting at J. Kennedy and
- 3 Associates, Inc. ("Kennedy"). My business address is 570 Colonial Park Drive, Suite 305,
- 4 Roswell, Georgia, 30075.

5 Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL

6 **EXPERIENCE.**

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I graduated from Georgia Southern University with a degree in Mathematics, and I received a Master of Science Degree in Operations Research from the Georgia Institute of Technology, with coursework in energy policy and technology, regression analysis, simulation, optimization, and economic decision analysis. I started my electric utility industry consulting career at Kennedy in 2013, performing data analysis and testimony support services through December 2018. In 2019, I left Kennedy to work at Accenture for nearly three years, where I supported Accenture's global regulated energy team. The team was located within Accenture's procurement practice, and the team helped large commercial and industrial clients manage their energy costs and energy related initiatives pertaining to regulated utility tariffs, economic dispatch, planning, and market risk. I rejoined Kennedy in late 2021 and have since worked on several Integrated Resource Planning ("IRP") studies. I worked on projects in the states of Georgia, Utah, Louisiana,

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- and South Carolina. A summary of my education, experience, and expert testimony appearances is included in Exhibit LJW-1.
- 3 Q. ON WHOSE BEHALF DO YOU PROVIDE THIS TESTIMONY?
- 4 A. I am providing this testimony on behalf of the South Carolina Office of Regulatory

 Staff ("ORS").
- 6 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE
 7 COMMISSION OF SOUTH CAROLINA ("COMMISSION")?
- 8 A. No. However, I have testified before the Georgia Public Service Commission,
 9 including Georgia Power's 2022 IRP proceeding (Docket No. 44160) and in Georgia
 10 Power's Vogtle Construction Monitoring Proceeding (Docket No. 29849).

11 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my Direct Testimony is to describe my role in Kennedy's review of Dominion Energy South Carolina, Inc.'s ("DESC" or "Company") 2023 IRP ("2023 IRP"), including the assessment of the Company's compliance with certain statutory requirements of S.C. Code Ann. § 58-37-40 ("Section 40"), as amended by the South Carolina Energy Freedom Act ("Act 62"). Together with the ORS team, my colleague, Philip Hayet, and other consultants at Kennedy, we prepared a report entitled, "Review of Dominion Energy South Carolina, Inc. 2023 Integrated Resource Plan" (the "Report"). A copy of the Report is attached to ORS Witness Anthony Sandonato's Direct Testimony as Exhibit AMS-1. The Report includes the findings, conclusions, and recommendations based on the review of DESC's 2023 IRP. Mr. Hayet also filed Direct Testimony in this proceeding on behalf of ORS.

Q. DESCRIBE THE SCOPE OF KENNEDY'S REVIEW OF DESC'S IRP.

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A.	Kennedy performed a comprehensive review of the Company's planning process
	and IRP filing. As part of the review, Kennedy investigated the historical context of the
	IRP process in South Carolina, including the Section 40 requirements, and examined the
	Company's IRP submissions since the Act 62 requirements became effective.

Kennedy reviewed the significant features of DESC's IRP, including the load and energy forecasting process, Electric Vehicle ("EV") load forecast, reserve margin policy, demand side management ("DSM") and energy efficiency ("EE") assumptions, natural gas and carbon dioxide ("CO₂") price forecasting methodologies, existing supply side resources, development of generic new supply side resources, alternative resource plans that reflect the timing, type, size, and cost of new resource additions and retirements of existing resources, production cost modeling, economic analyses and ranking of expansion plan results, transmission system planning process and potential investments, and plans for distribution and integrated system planning.

Finally, Kennedy verified that all requirements prescribed by the Commission in prior orders have been addressed, including Order Nos. 2020-832 (2020 IRP), 2021-429 (2020 Modified IRP), 2022-713 (2021 IRP Update), and 2023-289 (2022 IRP Update).

Q. WHAT WERE YOUR PRIMARY RESPONSIBILITIES WITH REGARD TO THE **REPORT?**

- A. The Report was a collaborative effort developed by a number of consultants at Kennedy, and I had the primary responsibility of the following sections:
 - III.B. Energy and Demand Forecast;
 - III.C. Energy Efficiency and Demand Side Management;
 - III.E.2 Interconnection Limit and Build Limits:

1		• III.E.3 Integration Charges; and						
2		• III.G.2. PLEXOS Benchmarking.						
3	Q.	WHAT RECOMMENDATIONS IN THE REPORT WERE YOU RESPONSIBLE						
4		FOR?						
5	A.	Section I of the Report (Executive Summary) contains a list of all of ORS's						
6		recommendations for DESC for this IRP. The recommendations for which I was primarily						
7		responsible, include:						
8 9 10 11 12		B1. DESC should perform more detailed analyses to assess the reasonableness of its Residential and Commercial class peak load forecasts in future IRPs, and in particular, the Company should provide support for the assumption that the average peak load per residential and commercial customer will remain essentially constant over the forecast horizon;						
13 14 15		B2. DESC should provide details in Rebuttal Testimony on the Electric Vehicle ("EV") rate designs and load management programs the Company considers to mitigate EV impacts on peak demand and capacity need;						
16 17		C1. DESC should file results of corrected High and Low DSM Sensitivity Cases in Rebuttal Testimony;						
18 19		E1. DESC should discuss the appropriate modeling of integration costs for renewable resources in the Stakeholder Working Group; and						
20 21 22 23		G1. DESC should be required to conduct production cost model benchmark studies on an on-going basis, such as once every three years ahead of Comprehensive IRP proceedings, and the Company should discuss benchmarking results in the Stakeholder Working Group.						
24	Q.	PLEASE SUMMARIZE THE CONCLUSIONS OF YOUR ANALYSIS.						
25	A.	Although the Report contains more detail, I provide a brief summary of my						
26		conclusions that led to the recommendations listed above. Recommendation B1 concerns						
27		the Company's load forecast. DESC's forecast methodology assumed a near constant						
28		customer demand profile for the residential and commercial customer classes through the						

entire study period. The Company's forecast is primarily driven by the number of residential and commercial customers being served. ORS recommends the Company provide additional analysis and explanation for its nearly flat residential and customer peak load profiles over the study horizon.

Recommendation B2 concerns the Company's EV forecast and load mitigation plans. The Company's 2023 IRP EV adoption forecast results in an even greater impact on the Company's overall load forecast than the Company's 2022 IRP Update EV adoption forecast. While the impact of the EV load on the overall peak demand is relatively small today, over time, it is expected to grow significantly. As such, the Company should provide additional information regarding the Company's plans to manage the forecasted additional load and ORS recommends the Company provide details on the rate design and load management programs anticipated to mitigate peak demand impacts over time.

Recommendation C1 concerns the assumptions the Company used to model DSM and EE in the 2023 IRP. ORS detected several errors in the DSM sensitivity cases the Company modeled, which the Company confirmed in responses to ORS's discovery. The first error concerned the inclusion of an incorrect DSM energy impact assumption in the Low DSM sensitivity case. The second error concerned the inclusion of an incorrect DSM cost assumption in the High DSM case. ORS recommends DESC file updated analyses to correct the errors with its Rebuttal Testimony.

Recommendation E1 concerns the Company's modeling of integration costs associated with solar resources. The Company included solar integration impacts by modeling both an increase in the amount of operating reserve requirements needed when an increased amount of solar resources is added to the system, and an integration charge

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added to the cost of contracted power purchase agreement ("PPA") solar resources. The inclusion of integration costs and additional operating reserves for solar PPA resources could lead to the selection of too few solar PPA resources and overstatement of the costs of acquiring PPA resources. However, the Company's results indicate a substantial amount of solar PPA resources were selected, which mitigates the possible overstatement of costs, and therefore ORS recommends that solar integration modeling continue to be discussed in the Stakeholder Working Group.

Lastly, Recommendation G1 concerns the PLEXOS benchmarking study the Company filed with the 2023 IRP. A production cost model benchmark is an important exercise performed to validate that the production cost model is capable of accurately dispatching generation resources and simulating the operation of the utility's system. It is especially important to perform a benchmark as a utility's generation portfolio changes with the addition of new resources and the retirement of existing resources. DESC's Preferred Portfolio suggests there will be significant changes in the Company's generation portfolio over the next ten (10) to twenty (20) years. ORS recommends PLEXOS, or any successor production cost model the Company uses, be benchmarked on an ongoing basis, such as once every three years ahead of comprehensive IRP proceedings. Furthermore, the benchmark results should be discussed in the Stakeholder Working Group.

Q. WILL YOU UPDATE YOUR DIRECT TESTIMONY BASED ON INFORMATION THAT BECOMES AVAILABLE?

Yes. ORS fully reserves the right to revise its recommendations via supplemental testimony should new information not previously provided by the Company, or other sources, become available.

Docket No. 2023-9-E

2 A. Yes.

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RESUME OF LEAH JUSTIN WELLBORN, MANAGER OF CONSULTING

EDUCATION

M.S. Operations Research, Georgia Institute of Technology, 2017

B.S. Mathematics, Georgia Southern University, 2012

PROFESSIONAL AFFILIATIONS

Women's Energy Network, Greater Atlanta Chapter – Board Member (2019 – present)

EXPERIENCE

Ms. Wellborn has been working in regulated energy markets since early 2013. She has an undergraduate degree in mathematics and graduate degree in operations research. She started her career working at J. Kennedy and Associates, Inc., and sub-contracting to Hayet Power Systems Consulting. For these companies, she provided critical support in the areas of production cost modeling and data analysis through 2018. Ms. Wellborn then spent nearly 3 years at Accenture, supporting its global regulated energy team within the procurement practice, helping large commercial and industrial clients manage their energy spend and energy related initiatives, as they related to regulated utility tariffs, economic dispatch, planning, and market risk (energy efficiency, green tariffs, PPA/VPPA, etc.). Ms. Wellborn rejoined J. Kennedy and Associates in late 2021, and currently provides analytical support to clients in the areas of utility resource planning and market modeling.

2021 to J. Kennedy and Associate, Inc.

Present: Manager, Consulting

Performs analysis and prepares expert witness testimony on utility planning studies and economic evaluations in review of electric utility regulatory filings. Clients included State Public Service Commissions, Industrial Users Groups, and Consumer Advocacy Groups.

2019 to Accenture, LLP

2021: Associate Manager, Global Lead - Regulated Energy Procurement

As a part of Accenture Operations' Energy Management and Procurement practice, the Regulated Energy team helps clients identify opportunities for electricity and natural gas cost savings through data analysis and deep industry experience. Clients include large industrial and commercial end-use customers with locations spread across multiple geographies and utility service territories.

• Conducts tariff optimization analysis and ad hoc economic decision analysis for clients with operations and energy spend in areas served by regulated electricity and natural gas distribution utilities.

RESUME OF LEAH JUSTIN WELLBORN, MANAGER OF CONSULTING

- Leads cross functional international delivery team of 10, providing career counseling and project oversight. Supports international energy procurement functions as they relate to regulated utilities/energy markets of Australia, Southeast Asia, and Latin America.
- Manages project assessments and economic studies as they relate to resource planning or capacity/energy market risk and dispatch pricing (renewables, time-of-use tariffs, real-time-pricing/avoided cost, PPA, VPPA, etc.)
- Collaborates with all energy management work streams including utility bill management, renewable energy procurement, deregulated markets competitive sourcing, market intelligence, and project management/technology development initiatives to manage customer spend end to end.

2013 to J. Kennedy and Associate, Inc.

2019: Senior Consultant

Responsible for conducting research, performing data analysis, developing production-cost model input assumptions and running production-cost studies, analyzing model output, and conducting related economic studies.

CERTIFICATIONS

Energy Exemplar – Aurora Core Certification Course (March 2022) Energy Exemplar – PLEXOS Power Core Certification Course (June 2023)

CLIENTS SERVED

Georgia Public Service Commission Staff Louisiana Public Service Commission Staff Kentucky Industrial Utility Customers, Inc. Utah Office of Consumer Services South Carolina Office of Regulatory Staff Wisconsin Industrial Energy Group

RESUME OF LEAH JUSTIN WELLBORN, MANAGER OF CONSULTING

TESTIMONY AND EXPERT WITNESS APPEARANCES

Date 06/18	Case 29849	Jurisdict GA	Party Georgia Public Service Commission Staff	Utility Georgia Power	Subject Eighteenth Semi-Annual Vogtle Construction Monitoring Report
11/18	29849	GA	Georgia Public Service Commission Staff	Georgia Power	Nineteenth Semi-Annual Vogtle Construction Monitoring Report
5/22	44160	GA	Georgia Public Service Commission Staff	Georgia Power	2022 Integrated Resource Plan (Supply Side Resource Plan, Aurora)
10/22	44280	GA	Georgia Public Service	Georgia Power	2022 Rate Case (Revenue Forecast)